

PRODUCT INFORMATION BULLETIN

DESCRIPTION

Ad-Tek CNI is a calcium nitrite based admixture for inhibiting the corrosion of steel reinforcement in concrete. The product contains a minimum of 30% calcium nitrite by mass.

Ad-Tek CNI is an inhibitor, which protects against anodic corrosion.

Ad-Tek CNI is formulated to meet Australian Standard 1478.1-2000 as a Special Purpose Accelerating Admixture.

USES

Ad-Tek CNI is effective in inhibiting reinforcement corrosion in all types of concrete used in the construction of structures such as:

- Bridge decks
- Marine structures
- Parking garages
- Retaining walls
- Industrial plants
- Tunnels
- Exposed balconies.

BENEFITS

- Calcium nitrite based formula has been used for many years in the concrete industry.
- Chemically inhibits the corrosion process.
- Reduces the need for additional accelerating admixtures in cold weather.
- Corrosion inhibition in the presence of varying chloride concentration.
- Allows the use potential corrosive materials in concrete mix, e.g. beach sand.
- Extends the service life of reinforced concrete structures.
- Compatible with other commonly used Ad-Tek admixtures.

TECHNICAL DATA (typical)

Appearance	Viscous transparent liquid with a specific odour
Colour	Clear yellow
Density at 20OC	Approx. 1.3 kg/litre
pH value at 20OC	9-11
TEA Content	None
Air entrainment	May slightly reduce and a higher dose of air entraining agent may be required
Chloride content	None added

DOSAGES

Recommended dose is 10.0–30.0 litres per cubic metre of concrete. The dose rate of **Ad-Tek CNI** is directly related to the level of chloride protection – as given in the following table:

Chloride Protection Limit, Kg/cub m	Ad-Tek Dosage, L/cub m
3.6	10.0
4.8	12.5
5.9	15.0
6.9	17.5
7.8	20.0
8.6	22.5
9.4	25.0
9.5	27.5
9.6	30.0

Ad-Tek CNI will accelerate concrete setting time at all recommended dosages. To prevent the acceleration, Ad-Tek set retarding admixtures may be used, particularly for warm weather concreting. The accelerating effect of **Ad-Tek CNI** may be used in cold weather application.

APPLICATION

Ad-Tek CNI is best added to the freshly mixed concrete at the batch plant, but may be added to a ready-mix truck at the batch plant or at a building site.

It is necessary to adjust the mix water to account for the water in **Ad-Tek CNI**. Subtract 0.84 litre of water per litre of **Ad-Tek CNI**.

Pre-trial tests are always recommended.

PACKAGING

Ad-Tek CNI is available in 20-litre and 1000-litre containers, and in bulk.

STORAGE and SHELF LIFE

Store at a temperature between 5°C and 40°C. Shelf life in an unopened original container is one year.

HEALTH AND SAFETY

Ad-Tek CNI contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

Disclaimer: Any advice, recommendation, information, assistance or service provided by application is in good faith and is believed by AD-TEK PTY LTD to be appropriate and reliable. However, any advice, recommendation, information, assistance or service provided by AD-TEK PTY LTD is provided without liability.